

DOCUMENT A00831

# **ARMY CORPS OF ENGINEERS**

## **GENERAL PERMIT**

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**U.S. Army Corps of Engineers (USACE)  
SELF-VERIFICATION NOTIFICATION (SVN)**

**DATA REQUIRED BY THE PRIVACY ACT OF 1974**

**Authority** Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332.

**Principal Purpose** This information will be used in evaluating activities under Self-Verification procedures within Massachusetts.

**Routine Uses** Routine uses will include: (1) Documenting compliance with the terms and conditions of the General Permit (GP) for activities that may require authorization pursuant to one or more of USACE's Regulatory authorities. (2) Records may be referred to other Federal, State, and local agencies for evaluation and enforcement purposes.

**Disclosure** Failure to fully comply and abide by the GP terms and conditions prior to commencing work and after completion project may result in formal enforcement action, up to and including monetary penalties and/or legal action, pursuant to 33 CFR Part 326.

**Instructions** The permittee must complete ALL required sections of this document before commencing USACE-regulated activities. A copy of this completed SVN must be kept on site during construction and be made available for review by USACE and other Federal, State, & Local regulatory authorities at any time. Within 30 days of initiating project construction, the permittee shall submit the completed SVN to USACE. The SVN shall be submitted to USACE as **ONE signed document** that includes project plans and documentation that supports each field (e.g., emails, letters, description, phone calls, surveys). Electronic submissions to the following address are strongly preferred: [cenae-r-ma-sv@usace.army.mil](mailto:cenae-r-ma-sv@usace.army.mil). The email subject line shall contain the following: GP #, SVN, City/Town, and date submitted.

**(ITEMS 1 THRU 3 TO BE FILLED BY USACE)**

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED
--------------------	----------------------	------------------

**APPLICANT AND AGENT INFORMATION**

<b>4. APPLICANT'S NAME</b> First - Courtney      Middle -      Last - Walker Company - Massachusetts Department of Transportation - Highway + E-mail Address - Courtney.l.walker@dot.state.ma.us	<b>7. AGENT'S ADDRESS:</b> First - Danielle      Middle -      Last - Spicer Company - Green International Affiliates, Inc. + E-mail Address - dspicer@greenintl.com						
<b>5. APPLICANT'S ADDRESS:</b> Address- 10 Park Plaza, Room 7360 City - Boston      State - MA      Zip - 02116      Country - USA	<b>8. AGENT'S ADDRESS:</b> Address- 100 Ames Pond Drive, Suite 200 City - Tewksbury      State - MA      Zip - 01877 +      Country - U +						
<b>6. APPLICANT'S PHONE NOs. w/AREA CODE</b> <table style="width:100%;"> <tr> <td style="width:33%;">a. Residence N/A</td> <td style="width:33%;">b. Business 857-262-0757</td> <td style="width:33%;">c. Fax N/A</td> </tr> </table>	a. Residence N/A	b. Business 857-262-0757	c. Fax N/A	<b>9. AGENTS PHONE NOs. w/AREA CODE</b> <table style="width:100%;"> <tr> <td style="width:33%;">a. Residence N/A</td> <td style="width:33%;">b. Business 978 +</td> <td style="width:33%;">c. Fax N/A</td> </tr> </table>	a. Residence N/A	b. Business 978 +	c. Fax N/A
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a. Residence N/A	b. Business 978 +	c. Fax N/A					

**NAME, LOCATION, AND DESCRIPTION OF PROJECT SITE**

<b>10. PROJECT NAME OR TITLE</b> Bridge Replacement (W-38-003) Butters Row over MBTA, Wilmington, MA	<b>12. NAME OF WATERBODY</b> Vegetated Wetland (unnamed)
<b>11. FILE NUMBER(S) OF PREVIOUS USACE ACTIONS ON THE SITE (if applicable)</b> N/A	<b>14. PROJECT STREET ADDRESS (if applicable)</b> Address Butters Row Bridge over the MBTA Railroad + City - Wilmington      State - MA      Zip - 01877
<b>13. PROJECT COORDINATES (in decimal degrees)</b> Latitude: °N      Longitude: °W 42°32'19"      71°09'53"	

**ACTIVITY TYPE, PROJECT IMPACTS, AVOIDANCE & MINIMIZATION**

<b>15. GENERAL PERMIT ACTIVITIES (CHECK ALL THAT APPLY)</b> <table style="width:100%;"> <tr> <td>1 <input type="checkbox"/></td> <td>6 <input type="checkbox"/></td> <td>11 <input type="checkbox"/></td> <td>16 <input type="checkbox"/></td> <td>21 <input type="checkbox"/></td> </tr> <tr> <td>2 <input checked="" type="checkbox"/></td> <td>7 <input type="checkbox"/></td> <td>12 <input type="checkbox"/></td> <td>17 <input type="checkbox"/></td> <td>22 <input type="checkbox"/></td> </tr> <tr> <td>3 <input type="checkbox"/></td> <td>8 <input type="checkbox"/></td> <td>13 <input type="checkbox"/></td> <td>18 <input type="checkbox"/></td> <td>23 <input type="checkbox"/></td> </tr> <tr> <td>4 <input type="checkbox"/></td> <td>9 <input type="checkbox"/></td> <td>14 <input type="checkbox"/></td> <td>19 <input type="checkbox"/></td> <td>24 <input type="checkbox"/></td> </tr> <tr> <td>5 <input type="checkbox"/></td> <td>10 <input type="checkbox"/></td> <td>15 <input type="checkbox"/></td> <td>20 <input type="checkbox"/></td> <td>25 <input type="checkbox"/></td> </tr> </table>	1 <input type="checkbox"/>	6 <input type="checkbox"/>	11 <input type="checkbox"/>	16 <input type="checkbox"/>	21 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	7 <input type="checkbox"/>	12 <input type="checkbox"/>	17 <input type="checkbox"/>	22 <input type="checkbox"/>	3 <input type="checkbox"/>	8 <input type="checkbox"/>	13 <input type="checkbox"/>	18 <input type="checkbox"/>	23 <input type="checkbox"/>	4 <input type="checkbox"/>	9 <input type="checkbox"/>	14 <input type="checkbox"/>	19 <input type="checkbox"/>	24 <input type="checkbox"/>	5 <input type="checkbox"/>	10 <input type="checkbox"/>	15 <input type="checkbox"/>	20 <input type="checkbox"/>	25 <input type="checkbox"/>	<b>16. SUMMARY OF PROJECT IMPACTS (see instructions)</b> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:25%;">Area (square feet)</th> <th style="width:25%;">Length (linear feet)</th> <th style="width:25%;">Volume (cubic yards)</th> <th style="width:25%;">Duration</th> </tr> </thead> <tbody> <tr> <td>251 +</td> <td>N/A +</td> <td>14 (fill)</td> <td>Permanent +</td> </tr> <tr> <td>208 +</td> <td>N/A +</td> <td>0 +</td> <td>Temporary +</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Area (square feet)	Length (linear feet)	Volume (cubic yards)	Duration	251 +	N/A +	14 (fill)	Permanent +	208 +	N/A +	0 +	Temporary +												
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17. PROJECT PLANS (BY CHECKING THE BOXES BELOW, YOU CERTIFY THESE ITEMS ARE COMPLETE) (*see instructions*)

- ☒ a. Plans shall at least contain the following: Vicinity Map, Plan View, and Typical Cross Section View of the proposed activity.
- ☒ b. All direct, indirect and secondary impacts from USACE regulated activities are shown on the project plans.
- ☒ c. The size of the impact area for each activity (acre, square feet, linear feet) are shown on the project plans.
- ☒ d. For discharges of fill material (§404), the volume of fill material is identified on the project plans.
- ☒ e. The duration of each impact, permanent or temporary (X days), is identified on the project plans.
- ☐ f. Do activities with permanent impacts result in the loss of waters? If so, this is identified on the project plans.
- ☒ g. All aquatic resources in the vicinity of the USACE regulated activities are delineated on the project plans.

18. AVOIDANCE & MINIMIZATION (BY CHECKING THE BOXES BELOW, YOU CERTIFY THESE CRITERIA ARE MET) (*see instructions*)

- ☒ a. The project has been designed to avoid and minimize impacts to aquatic resources.
- ☒ b. The footprint of activities in waters of the U.S. has been reduced to only what is necessary to achieve the overall project purpose.
- ☒ c. All practicable measures have been taken to avoid and minimize impacts to aquatic resources through construction techniques and site access (e.g., Best Management Practices, Time of Year Restrictions).
- ☒ d. All temporary impacts from USACE regulated activities will be restored upon completion of construction and the project area will be returned to pre-construction contours and conditions.

**COMPLIANCE WITH FEDERAL REGULATIONS & SUPPLEMENTAL INFORMATION**

19. DUE DILIGENCE (*see instructions*)

Complete the entries below to document compliance with the following Federal requirements. Construction may NOT begin if a PCN is/may be required, and you must contact USACE to determine permitting requirements. Documentation that demonstrates how the activity complies with each field below shall be submitted to the USACE as noted in the instructions block. See each General Condition (GC) in the GP for how to comply with each requirement.

- |  |  |
|--|--|
| a. State Historic Preservation Officer   | Per Appendix A, the activity has no potential to affect historic properties.             |
| b. Massachusetts BUAR                    | Per Appendix A, BUAR was notified and they did not respond with concerns within 30 days. |
| c. Tribal Historic Preservation Officers | The Tribe(s) were notified and they didn't respond with concerns within 30 days.         |
| d. Endangered Species Act - NOAA         | ESA consultation completed by another Federal agency.                                    |
| e. Endangered Species Act - USFWS        | The activity is not located within the ESA-listed Species Range.                         |
| f. Northern Long Eared Bat (ESA)         | NLAA determination reached with the Rangewide D-Key. See Instructions below.*            |
| g. Essential Fish Habitat                | The project footprint does not contain EFH (see EFH definition in the MA GP).            |
| h. Wild & Scenic Rivers                  | There are no WSR's within 0.25 miles of the project area.                                |
| i. 401 Water Quality Certification 401   | Select Option<br>401 WQC/OOC File Number: 23-WW11-0002-APP    OOC issued:    401 issued: |
| j. Section 408 Permission                | Not Required per GC 15a-f, no Federal Projects are within the project vicinity.          |
| k. Coastal Zone                          | The project is not located within the coastal zone.                                      |
| l. Construction Mats                     | N/A, the activity does not require the installation of construction mats.                |
| m. Time of Year Restrictions             | N/A, the project is not located in a waterbody that has TOY restrictions.                |
| n. Vernal Pools                          | Per GC 28, the project is not located in a vernal pool.                                  |
| o. Sediment & Erosion Controls           | Per GC 25, the activity uses BMPs to avoid/minimize sedimentation & erosion.             |
| p. Stream/Wetland Crossings              | The activity does not require a stream/wetland crossing.                                 |

20. AQUACULTURE ACTIVITIES - GP 18 (*see instructions*)

- ☐ a. If required, an Aquaculture Certification from the Massachusetts Division of Marine Fisheries was obtained prior to commencing work.
- ☐ b. Coordination with the U.S. Coast Guard pursuant to Private Aids to Navigation has occurred prior to commencing work.
- ☐ c. If required, a MEPA Certificate was obtained from the Massachusetts Environmental Protection Agency prior to commencing work. **Not Required**
- ☒ d. The prospective permittee contacted local authorities (e.g. harbormaster, select board, shellfish constable) for authorization of their facility prior to commencing work.

21. ADDITIONAL INFORMATION/ATTACHMENTS (*see instructions*)

- ☒ a. The project plans are enclosed in this SVN submittal (see block 17).
- ☒ b. The activity IS funded through the Bipartisan Infrastructure Bill (also known as the Infrastructure Investment and Jobs Act).
- ☒ c. All required state, local and federal approvals were acquired prior to starting construction in USACE jurisdiction.
- ☒ d. After construction of the activity is completed, a complete Certificate of Compliance will be submitted to USACE.

22. IS THERE ANOTHER LEAD FEDERAL AGENCY:

- ☒ YES ☐ NO Federal Highway Administration

23. STATEMENT OF AUTHORIZATION (*see instructions*)

I certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

<b>Courtney Walker</b> <small>Digitally signed by Courtney Walker Date: 2023.06.28 06:19:43 -04'00'</small>	<b>6/28/23</b>		<b>6/28/2023</b>
SIGNATURE OF APPLICANT	DATE	SIGNATURE OF AGENT	DATE

24. SIGNATURES (*see instructions*)

I hereby certify that the information in this Self-Verification Notification is complete and accurate. As the applicant or their duly authorized agent, I certify the activity was completed in accordance with the terms and conditions of the GP. This includes all applicable terms, general conditions, and activity-specific GP criteria. I agree to allow the duly authorized representatives of the Corps of Engineers Regulatory Program and other regulatory or advisory agencies to enter upon the premises of the project site at reasonable times to evaluate inspect and photograph site conditions. This consent to enter the property is superior to, takes precedence over, and waives any communication to the contrary. For example, if the property is posted as "no trespassing" this consent specifically supersedes and waives that prohibition and grants permission to enter the property despite such posting.

<b>Courtney Walker</b> <small>Digitally signed by Courtney Walker Date: 2023.06.28 06:20:21 -04'00'</small>	<b>6/28/23</b>		<b>6/28/2023</b>
SIGNATURE OF APPLICANT	DATE	SIGNATURE OF AGENT	DATE

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.

**Instructions for Preparing a  
Department of the Army  
General Permit (GP) Self-Verification**

**Blocks 1 through 3.** To be completed by the Corps of Engineers.

**Block 4. Applicant' Name.** Enter the name and the e-mail address of the responsible party or parties. If the responsible party is an agency, company, corporation, or other organization, indicate the name of the organization and responsible officer and title. If more than one party is associated with the self-verification, please attach a sheet of paper with the necessary information marked Block 4.

**Block 5. Address of Applicant.** Please provide the full address of the party or parties responsible for the self-verification. If more space is needed, attach an extra sheet of paper marked Block 5.

**Block 6. Applicant Telephone Number(s).** Please provide the telephone number where you can usually be reached during normal business hours.

**Blocks 7 through 9.** To be completed, if you choose to have an agent.

**Block 7. Authorized Agent's Name and Title.** Indicate name of individual or agency, designated by you, to represent you in this process. An agent can be an attorney, builder, contractor, engineer, consultant, or any other person or organization. Note: An agent is not required.

**Blocks 8 and 9. Agent's Address and Telephone Number.** Please provide the complete mailing address of the agent, along with the telephone number where they can be reached during normal business hours.

**Block 10. Proposed General Permit Activity Name or Title.** Please provide a name identifying the proposed GP activity, e.g., Windward Marina, Rolling Hills Subdivision, or Smith Commercial Center.

**Block 11. File Number(s) of Previous USACE Actions on the Site** Please provide any known USACE file number. If the activity does not have a known USACE file number, you may state N/A.

**Block 12. Name of Waterbody.** Please provide the name (if it has a name) of any stream, lake, marsh, or other waterway to be directly impacted by the GP activity. If it is a minor (no name) stream, identify the waterbody the minor stream enters.

**Block 13. Proposed Activity Coordinates.** Please enter the latitude and longitude of where the proposed GP activity is located. Indicate whether the project location provided is the center of the project or whether the project location is provided as the latitude and longitude for each of the "corners" of the project area. If there are multiple sites, please list the latitude and longitude of each site (center or corners) on a separate sheet of paper and mark as Block 13.

**Block 14. Proposed Activity Street Address.** If the proposed activity is located at a site having a street address (not a box number), enter it in Block 14.

**Block 15. General Permit Activity Type.** Please select all GP activity types that apply to the proposed activity. A list of GP activity types can be found in Section III of the GP.

**Block 16. Summary of Project Impacts.** Please provide ALL proposed impacts, both temporary and permanent in duration, that are located in Waters of the United States. The area of impact shall be provided in square feet (SF). When applicable, impacts that result in conversion of stream bank or shoreline must also be identified in linear feet (LF). Dredging or the discharge of dredged or fill material shall also include the volume, cubic yards (CY), of material removed from or placed into Waters of the U.S. If more entries are required, please attach a table matching the desired format in Block 16.

**Block 17. Project Plans.** Please verify that items a-g are included in the project plans. Three types of illustrations are necessary to properly depict the proposed work. These illustrations or drawings are identified as a Vicinity Map, a Plan View (Aerial view) and a Cross Section Map. For linear projects (e.g. roads, subsurface utility lines, etc.) gradient drawings (longitudinal profile) should also be included. Plans must accurately depict the existing conditions and all aspects of the proposed activity located in waters of the U.S. Please submit one copy of all drawings formatted to print on 8½ x 11 inch or 11 x 17 inch plain white paper. Use the fewest number of sheets necessary for your drawings or illustrations. Each illustration should identify the project, the applicant, and the type of illustration (vicinity map, plan view, or cross section). While illustrations need not be certified engineering sheets; they should be clear, accurate, contain all necessary information, and depict all proposed work. Each submission must also include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current wetland delineation manual and regional supplement published by USACE.

**Block 18. Avoidance & Minimization.** Please verify that items a-d have been implemented for the proposed activity.

**Block 19. Due Diligence.** Please complete all the fields and submit documentation to USACE to demonstrate compliance with the above requirements. This Documentation may include emails, letters, meeting notes, phone call log, project narrative, project plans, a species list from the NOAA Section 7 Mapper, a completed copy of the IPAC determination keys, etc. Documentation should be limited to what is necessary to demonstrate how the proposed activity meets each requirement. Refer to the MA GP, Appendix A, for specific guidance on the identification of previously identified historic properties and previously unidentified historic properties. Endangered Species: \*The applicant must be designated as the non-federal representative for the purposes of Section 7 consultation to select the Rangewide D-Key options. Otherwise, the applicant shall select the following option when IPAC indicates the NLEB is present: "The activity IS located within the NLEB Species Range (PCN Required)."

**Block 20. Aquaculture Activities.** Please verify that items a-d have been obtained or completed prior to commencing work in waters of the U.S.

**Block 21. Additional Information/Attachments.** Please verify that items a-d have been completed prior to commencing work in waters of the U.S.

**Block 22. Lead Federal Agency.** Please identify if there is another lead federal agency involved with the proposed activity. Enter the lead federal agency name (e.g., the Federal Emergency Management Agency, FEMA) and the agency's designated person of contact for the activity.

**Block 23. Statement of Authorization.** The applicant shall sign this section for all activities. If an agent is to be employed, the agent shall sign this section.

**Block 24. Signatures.** The SVN must be signed by the person proposing to undertake the GP activity, and if applicable, the authorized party (agent) that prepared the SVN. The signature of the person proposing to undertake the GP activity shall be an affirmation that the party submitting the SVN possesses the requisite property rights to undertake the GP activity.

## ***ATTACHMENTS***

- CULTURAL RESOURCES PROJECT RECORD
- PROJECT NOTIFICATION FORM
- THPO & BUAR COORDINATION
- SECTION 7 CONSULTATION / USFWS
- WQC/ACOE PLAN SET, DATED 03/14/2023

**CULTURAL RESOURCES PROJECT RECORD**

City/Town:	Wilmington	Project #	608929	Date Cleared	3/15/2023
Project Name	Bridge Replacement, W-38-003, Butters Row over MBTA	Date Filed	3/15/2023	Finding Under Review	<input type="checkbox"/>
		FHWA to MHC			
Project Type:	Bridge Replacement	Early Coord. Letter Sent:	<input checked="" type="checkbox"/>	Reviewer:	KJ
Review:	Section 106 (PA)	Comment Received:	<input type="checkbox"/> MHC <input type="checkbox"/> LHC	Consultant	
Finding:	Stip VB - No historic properties affected				
Comments	An Early Coordination letter was sent to the Wilmington Historical Commission on February 25, 2021. Tribal notification was sent to the Narragansett THPO, Aquinnah Wampanoag THPO and the Mashpee Wampanoag THPO on March 15, 2023.				

Determination based on: ☒ Scope of Work ☒ Plans ☐ Inventory ☒ Site Visit ☐ Archaeological Survey*Attach appropriate documentation for checked items***Projects Requiring No Massachusetts SHPO Review****Programmatic Agreement, Appendix 1 (check all that apply) :**

- |   |   |
|---|---|
| <input type="checkbox"/> 1) Interstate bridge or roadway projects                         | <input type="checkbox"/> 16) Bridge (less than 20' span)                  |
| <input type="checkbox"/> 2) Resurfacing, repair existing roadways                         | * <input type="checkbox"/> 17) Highway safety improvement                 |
| * <input type="checkbox"/> 3) Reconstruction on existing roadway                          | <input type="checkbox"/> 18) Drainage system element                      |
| * <input type="checkbox"/> 4) Roadway geometrics, intersections                           | * <input type="checkbox"/> 19) Traffic signal, safety improvement         |
| * <input type="checkbox"/> 5) Curbs and sidewalks   | * <input type="checkbox"/> 20) Intelligent Transportation System project  |
| <input type="checkbox"/> 6) Pavement markings, rumble strips, etc                         | <input type="checkbox"/> 21) Rest area, maintenance facility              |
| <input type="checkbox"/> 7) Curbs, sidewalks (MAAB, ADA)                                  | * <input type="checkbox"/> 22) Bicycle, pedestrian lane, path or facility |
| * <input type="checkbox"/> 8) Removal of trees  | <input type="checkbox"/> 23) Lighting system                              |
| <input type="checkbox"/> 9) Landscaping   | <input type="checkbox"/> 24) Sign   |
| <input type="checkbox"/> 10) Utilities  | <input type="checkbox"/> 25) Hazardous waste                              |
| <input type="checkbox"/> 11) Railroad crossing  | <input type="checkbox"/> 26) Highway fencing                              |
| <input type="checkbox"/> 12) Stream stabilization and restoration                         | <input type="checkbox"/> 27) Emergency repair                             |
| <input type="checkbox"/> 13) Wetland mitigation area                                      | <input type="checkbox"/> 28) Erosion control                              |
| * <input type="checkbox"/> 14) Bridge (NR "Not Eligible" or "Conditionally Not Eligible") | <input type="checkbox"/> 29) Noise barrier                                |
| * <input type="checkbox"/> 15) Bridge (concrete slab post 1900, steel stringer)           | * National Register eligibility evaluation required                       |

**-OR-****No Historic Properties Affected****Programmatic Agreement Stipulation V.B. (check one):**

- ☒ No NR listed or -eligible properties within Area of Potential Effect  
☐ No effect on National Register listed or -eligible properties

Reviewer's Initials: KJ JmH



## CULTURAL RESOURCES PROJECT RECORD

### Summary of MassDOT Highway Division Finding (Appendix 1 and Section V.B. Projects only)

The Massachusetts Department of Transportation (MassDOT) proposes to replace Bridge W-38-003, which carries Butters Row over the MBTA Lowell Line/ B&M Railroad in Wilmington. Bridge W-38-003 was originally constructed as a two-span structure in 1928, and reconstructed in 1978. A third span was added to the east of the main span as part of an underclearance improvement project for the railroad. The bridge is now comprised of a three-span timber stringer superstructure, with timber pile bent piers and reinforced concrete stub abutments. The existing bridge carries a single 13.5' travel lane (about 15.5' wide out-to-out), providing two-way travel in one direction at a time. It has no formal railings, only timber beam curbs with chain-link fence barriers above.

The proposed work will include full replacement of the bridge on existing alignment with a significantly wider structure and approach roadway. The bridge and approach roadway cross-section will be widened to 43', to include two 11' travel lanes, 5' shoulders and 5.5' sidewalks. The proposed new bridge will consist of a single-span steel I-beam stringer superstructure supported by new precast reinforced concrete cantilever abutments on micropile footings. The bridge will have CP-PL2 reinforced concrete parapet railings with anti-missile barriers above the railroad. Roadway reconstruction along the bridge approaches will extend approximately 300' to the west and 400' to the east. The bridge will be raised to increase the vertical underclearance by 1'3", with associated grade increases along the approaches and sideslope fill. An existing railroad and sewer line maintenance access will be reconstructed to the northwest of the bridge, with a reinforced concrete retaining wall along the roadway to minimize wetland impacts in this area.

Additionally, geometric improvements are proposed to better align the Butters Row/Cross Street/Main Street intersection. The Butters Row approach will be shifted approximately 70' to the north and the Cross Street approach will be shifted slightly to the north to create a 4-way T-intersection. A stormwater bioretention basin will be installed at the existing intersection, with asphalt removed and the basin graded and planted with native species. A 300 sq. ft. wetland replication area is proposed to the north of Butters Row at the Main Street intersection, situated at the proposed toe of slope within a previously disturbed area.

Review of the National Register of Historic Places and the Inventory of Historic and Archaeological Assets revealed no National Register-listed or Inventoried districts/areas or individual properties within or adjacent to the project area. Kurt Jergensen, MassDOT Historic Bridge Specialist, reviewed Bridge W-38-003 and determined it to be ineligible for listing in the National Register. The bridge was substantially altered in 1987. Additionally, it is a typical early-20th century timber stringer bridge with no architectural character and standard engineering details utilized by railroads in overpass bridges since the mid-19th century.

A review of the MHC archaeological base maps revealed one pre-contact site and one historic site recorded in the vicinity of the project area. Site 19-MD-674 is located approximately 0.80 miles southwesterly of the project area. The Middlesex Canal (WMG.HA.1) is located approximately 0.30 miles southwesterly of the project area. Both resources are well outside the project's direct area of potential effect (APE) and will not be impacted by the proposed project work. A portion of the Butters Row project area was included in a Phase I archaeological survey in 1976. Disturbed areas and fill were identified near the current project's APE.

It is the opinion of the MassDOT Archaeologist that the project's direct APE has low sensitivity for significant archaeological resources. In addition to the results of the 1976 survey, the project area has been impacted by past roadway, bridge, railroad, utility, and drainage construction, and roadside development. A site visit to the project area on March 8, 2022 confirmed the disturbed nature of the project area. The wetland replication area proposed adjacent (north) of the Main Street / Butters Row intersection will be located an unfavorable area.

Based on the nature and location of the proposed work, with no National Register-listed or -eligible resources present within or adjacent to the project area, the project meets the exemption requirements under Stipulation V.B of the Section 106 Programmatic Agreement and no further review of the proposed project is necessary.

Reviewer's Initials: \_\_\_\_\_

## 950 CMR: OFFICE OF THE SECRETARY OF THE COMMONWEALTH

APPENDIX A  
 MASSACHUSETTS HISTORICAL COMMISSION  
 220 MORRISSEY BOULEVARD  
 BOSTON, MASS. 02125  
 617-727-8470, FAX: 617-727-5128

**PROJECT NOTIFICATION FORM**

**Project Name:** Replacement of Bridge W-38-003 (MassDOT 607327)  
**Location /Address:** Butters Row over MBTA/ B&M Railroad  
**City/Town:** Wilmington  
**Project Proponent**  
**Name:** Massachusetts Department of Transportation  
**Address:** 10 Park Plaza  
**City/Town/Zip/Telephone:** Boston, MA 02116 / T: 207-590-4999

Agency license or funding for the project (list all licenses, permits, approvals, grants or other entitlements being sought from state and federal agencies).

<u>Agency Name</u>	<u>Type of License or funding (specify)</u>
FHWA	Federal Aid funding

ACOE	Section 404 permit
------	--------------------

**Project Description (narrative):**

The Massachusetts Department of Transportation (MassDOT) proposes to replace Bridge W-38-003, which carries Butters Row over the MBTA Lowell Line/ B&M Railroad in Wilmington. Bridge W-38-003 was originally constructed as a two-span structure in 1928, and reconstructed in 1978. A third span was added to the east of the main span as part of an underclearance improvement project for the railroad. The bridge is now comprised of a three-span timber stringer superstructure, with timber pile bent piers and reinforced concrete stub abutments. The existing bridge carries a single 13.5' travel lane (about 15.5' wide out-to-out), providing two-way travel in one direction at a time. It has no formal railings, only timber beam curbs with chain-link fence barriers above.

The proposed work will include full replacement of the bridge on existing alignment with a significantly wider structure and approach roadway. The bridge and approach roadway cross-section will be widened to 43', to include two 11' travel lanes, 5' shoulders and 5.5' sidewalks. The proposed new bridge will consist of a single-span steel I-beam stringer superstructure supported by new precast reinforced concrete cantilever abutments on micropile footings. The bridge will have CP-PL2 reinforced concrete parapet railings with anti-missile barriers above the railroad. Roadway reconstruction along the bridge approaches will extend approximately 300' to the west and 400' to the east. The bridge will be raised to increase the vertical underclearance by 1'3", with associated grade increases along the approaches and sideslope fill. An existing railroad and sewer line maintenance access will be reconstructed to the northwest of the bridge, with a reinforced concrete retaining wall along the roadway to minimize wetland impacts in this area.

Additionally, geometric improvements are proposed to better align the Butters Row/Cross Street/Main Street intersection. The Butters Row approach will be shifted approximately 70' to the north and the Cross Street approach will be shifted slightly to the north to create a 4-way T-intersection. A stormwater bioretention basin will be installed at the Butters Row intersection, with asphalt along the existing roadway alignment

950 CMR: OFFICE OF THE SECRETARY OF THE COMMONWEALTH

APPENDIX A (continued)

removed and the basin graded and planted with native species. A 300 sq. ft. wetland replication area is proposed to the north of Butters Row at the Main Street intersection, situated at the proposed toe of slope within a previously disturbed area.

**Does the project include demolition? If so, specify nature of demolition and describe the building(s) which are proposed for demolition.**

Bridge W-38-002 will be removed and replaced. Kurt Jergensen, MassDOT Historic Bridge Specialist, reviewed Bridge W-38-003 and determined it to be ineligible for listing in the National Register. The bridge was substantially altered in 1987. Additionally, it is a typical early-20th century timber stringer bridge with no architectural character and standard engineering details utilized by railroads in overpass bridges since the mid-19th century.

**Does the project include rehabilitation of any existing buildings? If so, specify nature of rehabilitation and describe the building(s) which are proposed for rehabilitation**

N/A

**Does the project include new construction? If so, describe (attach plans and elevations if necessary).**

Bridge W-38-002 will be removed and replaced on the same alignment, with a significantly wider structure and approach roadway. The bridge and approach roadway cross-section will be widened to 43', to include two 11' travel lanes, 5' shoulders and 5.5' sidewalks. The proposed new bridge will consist of a single-span steel I-beam stringer superstructure supported by new precast reinforced concrete cantilever abutments on micropile footings.

**To the best of your knowledge, are any historic or archaeological properties known to exist within the project's area of potential impact? If so, specify.**

Review of the National Register of Historic Places and the Inventory of Historic and Archaeological Assets revealed no National Register-listed or Inventoried districts/areas or individual properties within or adjacent to the project area.

A review of the MHC archaeological base maps revealed one pre-Contact site and one historic site recorded in the vicinity of the project area. Site 19-MD-674 is located approximately 0.80 miles southwesterly of the project area. The Middlesex Canal (WMG.HA.1) is located approximately 0.30 miles southwesterly of the project area. Both resources are well outside the project's direct area of potential effects (APE) and will not be impacted by the proposed project work. A portion of the Butters Row project area was included in a Phase I archaeological survey in 1976. Disturbed areas and fill were identified near the current project's APE.

It is the opinion of the MassDOT Archaeologist that the project's direct APE has low sensitivity for significant archaeological resources. In addition to the results of the 1976 survey, the project area has been impacted by past roadway, bridge, railroad, utility, and drainage construction, and roadside development. A site visit to the project area on March 8, 2022 confirmed the disturbed nature of the project area. The wetland replication area proposed to the northwest of the Main Street/ Butters Row intersection is situated adjacent to an existing wetland, a location with unfavorable environmental conditions.

**What is the total acreage of the project area?**

Woodland	<1	acres	Productive Resources:		
Wetland		acres	Agriculture		acres
Floodplain		acres	Forestry		acres
Open Space		acres	Mining/Extraction		acres
Developed	<1	acres	Total Project Acreage	<2	acres

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APPENDIX A (continued)

What is the acreage of the proposed new construction? <1 acres

What is the present land use of the project area?

The proposed project work will take place within the existing bridge and roadway footprint, as well as disturbed areas to the north of the roadway. Land along the northerly side of Butters Row is undeveloped, characterized by mixed deciduous woodland. Disturbance has occurred immediately adjacent to the roadway in the past 50 years from erosion, as well as various roadside grading and driveway construction activities connected to the railroad.

Please attach a copy of the section of the USGS quadrangle map which clearly marks the project location.

This Project Notification Form has been submitted to the MHC in compliance with 950 CMR 71.00.

Signature of person submitting this form: Kurt Jergensen Date: 3/15/2023  
 Name: Kurt Jergensen  
 Address: 10 Park Plaza  
 City/Town/Zip: Boston, MA 02116  
 Telephone: 207-590-4999

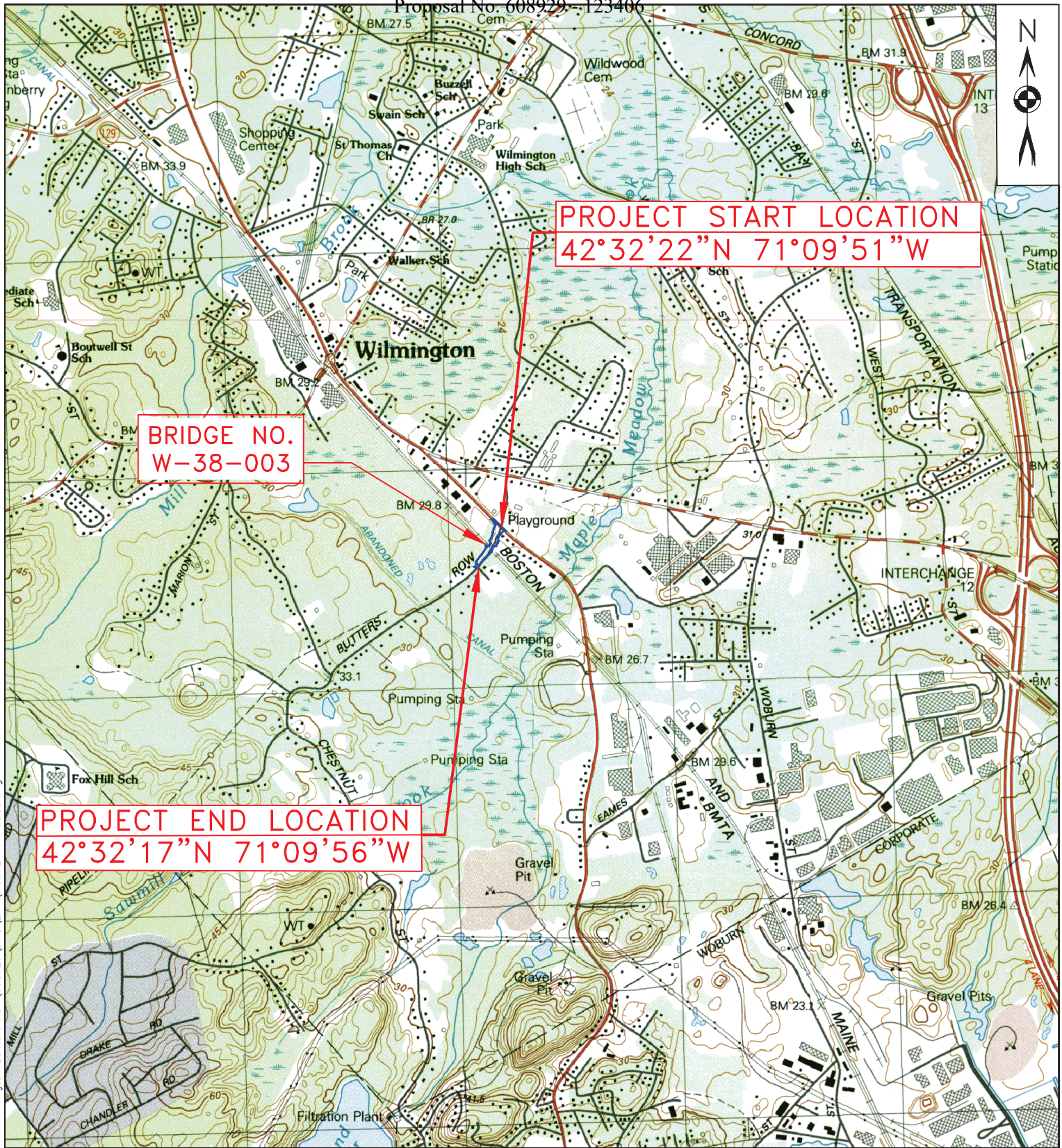
REGULATORY AUTHORITY

950 CMR 71.00: M.G.L. c. 9, §§ 26-27C as amended by St. 1988, c. 254.

7/1/93

950 CMR - 276





LEGEND

— APPROXIMATE LIMIT OF WORK

SCALE IN FEET



ELEVATIONS IN METERS

USGS LOCUS MAP

BRIDGE REPLACEMENT  
BRIDGE NO. W-38-003 (2NV), BUTTERS ROW OVER MBTA  
WILMINGTON, MA, PROJECT #608929

PREPARED BY:



GREEN INTERNATIONAL  
AFFILIATES, INC.  
CIVIL AND STRUCTURAL ENGINEERS  
239 LITTLETON RD, WESTFORD, MA (978) 923-0400  
24 ALBION RD, LINCOLN, RI (401) 305-7895

PREPARED FOR:



SCALE: AS NOTED

PROJECT NO. 13033.184

DATE: 11/16/2020

DRAWN BY: OF

CHECKED BY: MC

FIGURE  
1



**From:** [Jergensen, Kurt E. \(DOT\)](#)  
**To:** [Bettina Washington](#)  
**Cc:** [tcrm2@wampanoagtribe-nsn.gov](mailto:tcrm2@wampanoagtribe-nsn.gov); [Harwood, Jameson \(DOT\)](#)  
**Subject:** Wilmington, Br. W-38-003 replacement (MassDOT #608929)  
**Date:** Thursday, March 16, 2023 3:29:00 PM  
**Attachments:** [W-38-003 PNF.pdf](#)  
[Locus map.pdf](#)  
[608929\\_100% Highway Plans & Cross Sections.pdf](#)  
[608929\\_2nd Structural Submittal Bridge Plans.pdf](#)

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Dear Ms. Washington,

MassDOT is submitting the enclosed information regarding the above-noted project to the Wampanoag Tribe of Gay Head (Aquinnah) to meet the Section 106 consultation requirements of the US Army Corps of Engineers. Please submit any written comments or concerns regarding historic or archaeological properties that may be affected by this project to Carrie Lavallee, P.E., Chief Engineer, Massachusetts Department of Transportation, 10 Park Plaza, Boston, MA 02116-3973, Attn: Jameson Harwood.

You also may send comments, questions, or requests for more information by email to [Jameson.Harwood@state.ma.us](mailto:Jameson.Harwood@state.ma.us).

Thank you very much.

Kurt Jergensen  
Historic Bridge Specialist  
Environmental Services  
MassDOT, Highway Division  
Ten Park Plaza, Boston, MA 02116  
Cell: 207-590-4999

**From:** [Jergensen, Kurt E. \(DOT\)](#)  
**To:** [David Weeden](#)  
**Cc:** [106Review@mwtribe-nsn.gov](mailto:106Review@mwtribe-nsn.gov); [Harwood, Jameson \(DOT\)](#)  
**Subject:** Wilmington, Br. W-38-003 replacement (MassDOT #608929)  
**Date:** Thursday, March 16, 2023 3:35:00 PM  
**Attachments:** [W-38-003 PNF.pdf](#)  
[Locus map.pdf](#)  
[608929\\_100% Highway Plans & Cross Sections.pdf](#)  
[608929\\_2nd Structural Submittal Bridge Plans.pdf](#)

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Dear Mr. Weeden,

MassDOT is submitting the enclosed information regarding the above-noted project to the Mashpee Wampanoag Tribe to meet the Section 106 consultation requirements of the US Army Corps of Engineers. Please submit any written comments or concerns regarding historic or archaeological properties that may be affected by this project to Carrie Lavallee, P.E., Chief Engineer, Massachusetts Department of Transportation, 10 Park Plaza, Boston, MA 02116-3973, Attn: Jameson Harwood.

You also may send comments, questions, or requests for more information by email to [Jameson.Harwood@state.ma.us](mailto:Jameson.Harwood@state.ma.us).

Thank you very much.

Kurt Jergensen  
Historic Bridge Specialist  
Environmental Services  
MassDOT, Highway Division  
Ten Park Plaza, Boston, MA 02116  
Cell: 207-590-4999

**From:** [Jergensen, Kurt E. \(DOT\)](#)  
**To:** ["Tashtesook@aol.com"](mailto:Tashtesook@aol.com)  
**Cc:** [Harwood, Jameson \(DOT\)](#)  
**Subject:** Wilmington, Br. W-38-003 replacement (MassDOT #608929)  
**Date:** Friday, March 17, 2023 3:35:00 PM  
**Attachments:** [W-38-003 PNF.pdf](#)  
[Locus map.pdf](#)  
[608929\\_100% Highway Plans & Cross Sections.pdf](#)  
[608929\\_2nd Structural Submittal Bridge Plans.pdf](#)

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Dear Mr. Brown,

MassDOT is submitting the enclosed information regarding the above-noted project to the Narragansett Indian Tribe to meet the Section 106 consultation requirements of the US Army Corps of Engineers. Please submit any written comments or concerns regarding historic or archaeological properties that may be affected by this project to Carrie Lavallee, P.E., Chief Engineer, Massachusetts Department of Transportation, 10 Park Plaza, Boston, MA 02116-3973, Attn: Jameson Harwood.

You also may send comments, questions, or requests for more information by email to [Jameson.Harwood@state.ma.us](mailto:Jameson.Harwood@state.ma.us).

Thank you very much.

Kurt Jergensen  
Historic Bridge Specialist  
Environmental Services  
MassDOT, Highway Division  
Ten Park Plaza, Boston, MA 02116  
Cell: 207-590-4999



**From:** [Jergensen, Kurt E. \(DOT\)](#)  
**To:** [Robinson, David S \(EEA\)](#)  
**Cc:** [Harwood, Jameson \(DOT\)](#)  
**Subject:** Wilmington, Br. W-38-003 replacement (MassDOT #608929)  
**Date:** Thursday, March 16, 2023 3:32:00 PM  
**Attachments:** [W-38-003 PNF.pdf](#)  
[Locus map.pdf](#)  
[608929\\_100% Highway Plans & Cross Sections.pdf](#)  
[608929\\_2nd Structural Submittal Bridge Plans.pdf](#)

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Dear Mr. Robinson,

MassDOT is submitting the enclosed information regarding the above-noted project to the Board of Underwater Archaeological Resources to meet the Section 106 consultation requirements of the US Army Corps of Engineers. Please submit any written comments or concerns regarding historic or archaeological properties that may be affected by this project to Carrie Lavallee, P.E., Chief Engineer, Massachusetts Department of Transportation, 10 Park Plaza, Boston, MA 02116-3973, Attn: Jameson Harwood.

You also may send comments, questions, or requests for more information by email to [Jameson.Harwood@state.ma.us](mailto:Jameson.Harwood@state.ma.us).

Thank you very much.

Kurt Jergensen  
Historic Bridge Specialist  
Environmental Services  
MassDOT, Highway Division  
Ten Park Plaza, Boston, MA 02116  
Cell: 207-590-4999



## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
New England Ecological Services Field Office  
70 Commercial Street, Suite 300  
Concord, NH 03301-5094  
Phone: (603) 223-2541 Fax: (603) 223-0104



In Reply Refer To:

June 23, 2023

Project Code: 2023-0097178

Project Name: 608929 - WILMINGTON- BRIDGE REPLACEMENT, W-38-003, BUTTERS  
ROW OVER MBTA

Subject: List of threatened and endangered species that may occur in your proposed project  
location or may be affected by your proposed project

To Whom It May Concern:

*Updated 4/12/2023 - Please review this letter each time you request an Official Species List, we  
will continue to update it with additional information and links to websites may change.*

### **About Official Species Lists**

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Federal and non-Federal project proponents have responsibilities under the Act to consider effects on listed species.

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested by returning to an existing project's page in IPaC.

### **Endangered Species Act Project Review**

Please visit the “**New England Field Office Endangered Species Project Review and**

**Consultation**" website for step-by-step instructions on how to consider effects on listed species and prepare and submit a project review package if necessary:

<https://www.fws.gov/office/new-england-ecological-services/endangered-species-project-review>

**\*NOTE\*** Please do not use the **Consultation Package Builder** tool in IPaC except in specific situations following coordination with our office. Please follow the project review guidance on our website instead and reference your **Project Code** in all correspondence.

**Northern Long-eared Bat - (Updated 4/12/2023)** The Service published a final rule to reclassify the northern long-eared bat (NLEB) as endangered on November 30, 2022. The final rule went into effect on March 31, 2023. You may utilize the **Northern Long-eared Bat Rangewide Determination Key** available in IPaC. More information about this Determination Key and the Interim Consultation Framework are available on the northern long-eared bat species page:

<https://www.fws.gov/species/northern-long-eared-bat-myotis-septentrionalis>

For projects that previously utilized the 4(d) Determination Key, the change in the species' status may trigger the need to re-initiate consultation for any actions that are not completed and for which the Federal action agency retains discretion once the new listing determination becomes effective. If your project was not completed by March 31, 2023, and may result in incidental take of NLEB, please reach out to our office at [newengland@fws.gov](mailto:newengland@fws.gov) to see if reinitiation is necessary.

#### *Additional Info About Section 7 of the Act*

Under section 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to determine whether projects may affect threatened and endangered species and/or designated critical habitat. If a Federal agency, or its non-Federal representative, determines that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Federal agency also may need to consider proposed species and proposed critical habitat in the consultation. 50 CFR 402.14(c)(1) specifies the information required for consultation under the Act regardless of the format of the evaluation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/service/section-7-consultations>

In addition to consultation requirements under Section 7(a)(2) of the ESA, please note that under sections 7(a)(1) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species. Please contact NEFO if you would like more information.

**Candidate species** that appear on the enclosed species list have no current protections under the

ESA. The species' occurrence on an official species list does not convey a requirement to consider impacts to this species as you would a proposed, threatened, or endangered species. The ESA does not provide for interagency consultations on candidate species under section 7, however, the Service recommends that all project proponents incorporate measures into projects to benefit candidate species and their habitats wherever possible.

### **Migratory Birds**

In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see:

<https://www.fws.gov/program/migratory-bird-permit>

<https://www.fws.gov/library/collections/bald-and-golden-eagle-management>

Please feel free to contact us at **newengland@fws.gov** with your **Project Code** in the subject line if you need more information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat.

Attachment(s): Official Species List

Attachment(s):

- Official Species List

## OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**New England Ecological Services Field Office**

70 Commercial Street, Suite 300

Concord, NH 03301-5094

(603) 223-2541

## PROJECT SUMMARY

Project Code: 2023-0097178

Project Name: 608929 - WILMINGTON- BRIDGE REPLACEMENT, W-38-003,  
BUTTERS ROW OVER MBTA

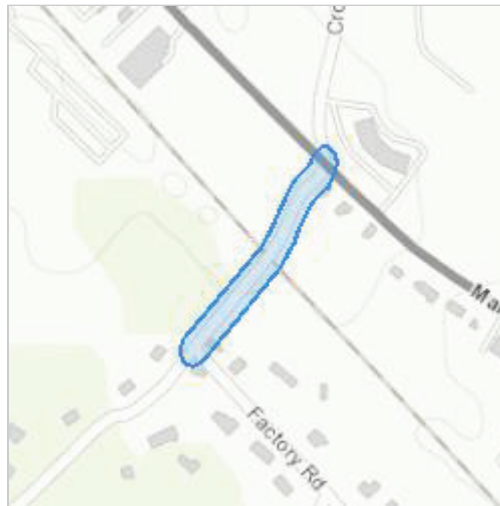
Project Type: Bridge - Replacement

Project Description: Proposed scope of work includes demolition and full replacement of the existing 3-span timber bridge structure at Butters Row over the MBTA Railroad in Wilmington.

Monarch Butterfly: Candidate Species only, no conservation measures at this time.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@42.53874955,-71.16467547671057,14z>



Counties: Middlesex County, Massachusetts

## ENDANGERED SPECIES ACT SPECIES

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## MAMMALS

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Endangered

## INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

## CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

## **IPAC USER CONTACT INFORMATION**

Agency: Massachusetts Department of Transportation

Name: Julia Hoogeboom

Address: 10 Park Plaza

City: Boston

State: MA

Zip: 02116

Email: julia.a.hoogeboom@dot.state.ma.us

Phone: 8574452880

## **LEAD AGENCY CONTACT INFORMATION**

Lead Agency: Federal Highway Administration





## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
New England Ecological Services Field Office  
70 Commercial Street, Suite 300  
Concord, NH 03301-5094  
Phone: (603) 223-2541 Fax: (603) 223-0104



In Reply Refer To:

August 02, 2022

Project code: 2022-0070371

Project Name: 608929 - WILMINGTON- BRIDGE REPLACEMENT, W-38-003, BUTTERS ROW OVER MBTA

Subject: Concurrence verification letter for the '608929 - WILMINGTON- BRIDGE REPLACEMENT, W-38-003, BUTTERS ROW OVER MBTA' project under the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request dated August 02, 2022 to verify that the **608929 - WILMINGTON- BRIDGE REPLACEMENT, W-38-003, BUTTERS ROW OVER MBTA** (Proposed Action) may rely on the concurrence provided in the February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action is within the scope and adheres to the criteria of the PBO, including the adoption of applicable avoidance and minimization measures, and may affect, but is not likely to adversely affect (NLAA) the endangered Indiana bat (*Myotis sodalis*) and/or the threatened Northern long-eared bat (*Myotis septentrionalis*). Consultation with the Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) is required.

The Service has 14 calendar days to notify the lead Federal action agency or designated non-federal representative if we determine that the Proposed Action does not meet the criteria for a NLAA determination under the PBO. If we do not notify the lead Federal action agency or designated non-federal representative within that timeframe, you may proceed with the Proposed Action under the terms of the NLAA concurrence provided in the PBO. This verification period allows Service Field Offices to apply local knowledge to implementation of the PBO, as we may

identify a small subset of actions having impacts that were unanticipated. In such instances, Service Field Offices may request additional information that is necessary to verify inclusion of the proposed action under the PBO.

**For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities:** If your initial bridge/culvert or structure assessments failed to detect Indiana bats, but you later detect bats prior to, or during construction, please submit the Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form (User Guide Appendix E) to this Service Office. In these instances, potential incidental take of Indiana bats may be exempted provided that the take is reported to the Service.

If the Proposed Action is modified, or new information reveals that it may affect the Indiana bat and/or Northern long-eared bat in a manner or to an extent not considered in the PBO, further review to conclude the requirements of ESA Section 7(a)(2) may be required. If the Proposed Action may affect any other federally-listed or proposed species, and/or any designated critical habitat, additional consultation between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please contact this Service Office.

The following species may occur in your project area and **are not** covered by this determination:

- Monarch Butterfly *Danaus plexippus* Candidate

## Project Description

The following project name and description was collected in IPaC as part of the endangered species review process.

### ***Name***

608929 - WILMINGTON- BRIDGE REPLACEMENT, W-38-003, BUTTERS ROW OVER MBTA

### ***Description***

608929 - WILMINGTON- BRIDGE REPLACEMENT, W-38-003, BUTTERS ROW OVER MBTA

Proposed scope of work includes demolition and full replacement of the existing 3-span timber bridge structure at Butters Row over the MBTA Railroad in Wilmington.

Monarch Butterfly: Candidate Species only, no conservation measures at this time.

## Determination Key Result

Based on your answers provided, this project(s) may affect, but is not likely to adversely affect the endangered Indiana bat and/or the threatened Northern long-eared bat, therefore, consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required. However, also based on your answers provided, this project may rely on the concurrence provided in the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

## Qualification Interview

1. Is the project within the range of the Indiana bat<sup>[1]</sup>?

[1] See [Indiana bat species profile](#)

**Automatically answered**

No

2. Is the project within the range of the Northern long-eared bat<sup>[1]</sup>?

[1] See [Northern long-eared bat species profile](#)

**Automatically answered**

Yes

3. Which Federal Agency is the lead for the action?

A) *Federal Highway Administration (FHWA)*

4. Are *all* project activities limited to non-construction<sup>[1]</sup> activities only? (examples of non-construction activities include: bridge/abandoned structure assessments, surveys, planning and technical studies, property inspections, and property sales)

[1] Construction refers to activities involving ground disturbance, percussive noise, and/or lighting.

No

5. Does the project include *any* activities that are **greater than** 300 feet from existing road/rail surfaces<sup>[1]</sup>?

[1] Road surface is defined as the actively used [e.g. motorized vehicles] driving surface and shoulders [may be pavement, gravel, etc.] and rail surface is defined as the edge of the actively used rail ballast.

No

6. Does the project include *any* activities **within** 0.5 miles of a known Indiana bat and/or NLEB hibernaculum<sup>[1]</sup>?

[1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

No

7. Is the project located **within** a karst area?

No

8. Is there *any* suitable<sup>[1]</sup> summer habitat for Indiana Bat or NLEB **within** the project action area<sup>[2]</sup>? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

[2] The action area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR Section 402.02). Further clarification is provided by the [User's Guide for the Range-wide Programmatic Consultation for Indiana Bat and Northern Long-eared Bat](#).

Yes

9. Will the project remove *any* suitable summer habitat<sup>[1]</sup> and/or remove/trim any existing trees **within** suitable summer habitat?

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

Yes

10. Will the project clear more than 20 acres of suitable habitat per 5-mile section of road/rail?

No

11. Have presence/probable absence (P/A) summer surveys<sup>[1][2]</sup> been conducted<sup>[3][4]</sup> **within** the suitable habitat located within your project action area?

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

[2] Presence/probable absence summer surveys conducted within the fall swarming/spring emergence home range of a documented Indiana bat hibernaculum (contact local Service Field Office for appropriate distance from hibernacula) that result in a negative finding requires additional consultation with the local Service Field Office to determine if clearing of forested habitat is appropriate and/or if seasonal clearing restrictions are needed to avoid and minimize potential adverse effects on fall swarming and spring emerging Indiana bats.

[3] For projects within the range of either the Indiana bat or NLEB in which suitable habitat is present, and no bat surveys have been conducted, the transportation agency will assume presence of the appropriate species. This assumption of presence should be based upon the presence of suitable habitat and the capability of bats to occupy it because of their mobility.

[4] Negative presence/probable absence survey results obtained using the [summer survey guidance](#) are valid for a minimum of two years from the completion of the survey unless new information (e.g., other nearby surveys) suggest otherwise.

Yes

#### **SUBMITTED DOCUMENTS**

- 608929\_rpt\_wilmington2\_nleb\_survey\_20210922.pdf <https://ipac.ecosphere.fws.gov/project/7H73T3KCGBEEFFCNU4SXVWLX6I/projectDocuments/115622624>

12. Did the presence/probable absence (P/A) summer surveys detect Indiana bats and/or NLEB<sup>[1]</sup>?

[1] P/A summer surveys conducted within the fall swarming/spring emergence home range of a documented Indiana bat hibernaculum (contact local Service Field Office for appropriate home range) that result in a negative finding requires additional consultation with the local Service Field Office to determine if clearing of forested habitat is appropriate and/or if seasonal clearing restrictions are needed to avoid and minimize potential adverse effects on fall swarming and spring emerging Indiana bats.

No

13. Were the P/A summer surveys conducted **within** the fall swarming/spring emergence range of a documented Indiana bat hibernaculum<sup>[1]</sup>?

[1] Contact the local Service Field Office for appropriate distance from hibernacula.

No

14. Does the project include activities **within documented NLEB habitat**<sup>[1][2]</sup>?

[1] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

[2] For the purposes of this key, we are considering documented corridors as that where Indiana bats and/or NLEB have actually been captured and tracked to using (1) radio telemetry; or (2) treed corridors located directly between documented roosting and foraging habitat.

No

15. Will the removal or trimming of habitat or trees occur **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors?

Yes

16. What time of year will the removal or trimming of habitat or trees **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors occur?

*C) During both the active and inactive seasons*

17. Will *any* tree trimming or removal occur **within** 100 feet of existing road/rail surfaces?

Yes

18. Will *any* tree trimming or removal occur **between** 100-300 feet of existing road/rail surfaces?

No

19. Are *all* trees that are being removed clearly demarcated?

Yes

20. Will the removal of habitat or the removal/trimming of trees involve the use of **temporary** lighting?

Yes

21. Will the removal of habitat or the removal/trimming of trees include installing new or replacing existing **permanent** lighting?

Yes

22. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation?

Yes

23. Does the project include slash pile burning?

No

24. Does the project include *any* bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)?

Yes

25. Is there *any* suitable habitat<sup>[1]</sup> for Indiana bat or NLEB **within** 1,000 feet of the bridge? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

[1] See the Service's current [summer survey guidance](#) for our current definitions of suitable habitat.

Yes

26. Has a bridge assessment<sup>[1]</sup> been conducted **within** the last 24 months<sup>[2]</sup> to determine if the bridge is being used by bats?

[1] See [User Guide Appendix D](#) for bridge/structure assessment guidance

[2] Assessments must be completed no more than 2 years prior to conducting any work below the deck surface on all bridges that meet the physical characteristics described in the Programmatic Consultation, regardless of whether assessments have been conducted in the past. Due to the transitory nature of bat use, a negative result in one year does not guarantee that bats will not use that bridge/structure in subsequent years.

No

27. Is the bridge **within** a known maternity colony's home range<sup>[1]</sup>?

[1] Contact your local FWS office for more information if you are uncertain about where the nearest known maternity colony is located.

No

28. Have presence/probable absence (P/A) summer surveys<sup>[1][2]</sup> been conducted for this project with at least one survey point **within** suitable habitat and **within** 0.25 miles of the bridge<sup>[3][4]</sup>?

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

[2] Presence/probable absence summer surveys conducted within the fall swarming/spring emergence home range of a documented Indiana bat hibernaculum (contact local Service Field Office for appropriate distance from hibernacula) that result in a negative finding requires additional consultation with the local Service Field Office to determine if clearing of forested habitat is appropriate and/or if seasonal clearing restrictions are needed to avoid and minimize potential adverse effects on fall swarming and spring emerging Indiana bats.

[3] For projects within the range of either the Indiana bat or NLEB in which suitable habitat is present, and no bat surveys have been conducted, the transportation agency will assume presence of the appropriate species. This assumption of presence should be based upon the presence of suitable habitat and the capability of bats to occupy it because of their mobility.

[4] Negative presence/probable absence survey results obtained using the [summer survey guidance](#) are valid for a minimum of two years from the completion of the survey unless new information (e.g., other nearby surveys) suggest otherwise.

*Yes, P/A summer surveys were conducted within 0.25 miles of the bridge*

#### **SUBMITTED DOCUMENTS**

- 608929\_rpt\_wilmington2\_nleb\_survey\_20210922.pdf <https://ipac.ecosphere.fws.gov/project/7H73T3KCGBEEFFCNU4SXVWLX6I/projectDocuments/115622624>

29. Did the presence/probable absence (P/A) summer surveys detect Indiana bats and/or NLEB<sup>[1]</sup>?

[1] P/A summer surveys conducted within the fall swarming/spring emergence home range of a documented Indiana bat hibernaculum (contact local Service Field Office for appropriate home range) that result in a negative finding requires additional consultation with the local Service Field Office to determine if clearing of forested habitat is appropriate and/or if seasonal clearing restrictions are needed to avoid and minimize potential adverse effects on fall swarming and spring emerging Indiana bats.

*No, Indiana bats and/or NLEBs were not detected during the P/A surveys*

30. Did the local Service Field Office verify<sup>[1]</sup> that this presence/probable absence (P/A) summer survey can be used for determining Indiana bat and/or NLEB absence from the bridge?

[1] Coordination with local US Fish and Wildlife Service Field Office regarding the applicability of P/A surveys for this use is required.

*Yes, the local FWS office confirmed that this P/A survey can be used to assume Indiana bats and/or NLEBs are absent from the bridge*

31. Will the bridge removal, replacement, and/or maintenance activities include installing new or replacing existing **permanent** lighting?

*Yes*



32. Does the project include the removal, replacement, and/or maintenance of *any* structure other than a bridge? (e.g., rest areas, offices, sheds, outbuildings, barns, parking garages, etc.)

No

33. Will the project involve the use of *any* **temporary** lighting in addition to the lighting already indicated for habitat removal (including the removal or trimming of trees), or bridge/structure removal, replacement or maintenance activities?

Yes

34. Is there *any* suitable habitat **within** 1,000 feet of the location(s) where **temporary** lighting (other than the lighting already indicated for habitat removal (including the removal or trimming of trees) or bridge/structure removal, replacement or maintenance activities) will be used?

Yes

35. Will the project install *any* new or replace any existing **permanent** lighting in addition to the lighting already indicated for habitat removal (including the removal or trimming of trees) or bridge/structure removal, replacement or maintenance activities?

Yes

36. Is there *any* suitable habitat **within** 1,000 feet of the location(s) where **permanent** lighting (other than the lighting already indicated for habitat removal (including the removal or trimming of trees) or bridge/structure removal, replacement or maintenance activities) will be installed or replaced?

Yes

37. Does the project include percussives or other activities (**not including tree removal/trimming or bridge/structure work**) that will increase noise levels above existing traffic/background levels?

Yes

38. Will the activities that use percussives (**not including tree removal/trimming or bridge/structure work**) and/or increase noise levels above existing traffic/background levels be conducted *during* the active season<sup>[1]</sup>?

[1] Coordinate with the local Service Field Office for appropriate dates.

Yes

39. Will *any* activities that use percussives (**not including tree removal/trimming or bridge/structure work**) and/or increase noise levels above existing traffic/background levels be conducted *during* the inactive season<sup>[1]</sup>?

[1] Coordinate with the local Service Field Office for appropriate dates.

Yes

40. Are *all* project activities that are **not associated with** habitat removal, tree removal/trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives, limited to actions that DO NOT cause any additional stressors to the bat species?

Examples: lining roadways, unlighted signage , rail road crossing signals, signal lighting, and minor road repair such as asphalt fill of potholes, etc.

Yes

41. Will the project raise the road profile **above the tree canopy**?

No

42. Are the wetland or stream protection activities associated with compensatory wetland/stream mitigation portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

**Automatically answered**

*Yes, because your activities associated with compensatory wetland/stream mitigation activities do not clear suitable summer habitat and are not within 0.5 miles of Indiana bat or NLEB hibernaculum.*

43. Are the project activities that use percussives (not including tree removal/trimming or bridge/structure work) consistent with a Not Likely to Adversely Affect determination in this key?

**Automatically answered**

*Yes, because the activities are within 300 feet of the existing road/rail surface, greater than 0.5 miles from a hibernacula, and conducted during the active season within undocumented habitat.*

44. Are the project activities that use percussives (not including tree removal/trimming or bridge/structure work) and/or increase noise levels above existing traffic/background levels consistent with a No Effect determination in this key?

**Automatically answered**

*Yes, because the activities are within 300 feet of the existing road/rail surface, greater than 0.5 miles from a hibernacula, and conducted during the inactive season*

45. Is the location of this project consistent with a Not Likely to Adversely Affect determination in this key?

**Automatically answered**

*Yes, because no bats were detected during presence/probable absence surveys conducted during the summer survey season and outside of the fall swarming/spring emergence periods. Additionally, all activities were at least 0.5 miles from any hibernaculum.*

46. Is the bridge removal, replacement, or maintenance activities portion of this project consistent with a No Effect determination in this key?

**Automatically answered**

*Yes, because the bridge has been assessed using the criteria documented in the BA and no signs of bats were detected*

47. **General AMM 1**

Will the project ensure *all* operators, employees, and contractors working in areas of known or presumed bat habitat are aware of *all* FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable Avoidance and Minimization Measures?

Yes

## Project Questionnaire

1. Have you made a No Effect determination for *all* other species indicated on the FWS IPaC generated species list?

N/A

2. Have you made a May Affect determination for *any* other species on the FWS IPaC generated species list?

N/A

3. How many acres<sup>[1]</sup> of trees are proposed for removal between 0-100 feet of the existing road/rail surface?

[1] If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

1.1

4. Please describe the proposed bridge work:

*The existing bridge is a wooden superstructure and only one lane wide. The entire bridge and substructure will be removed and replaced with at Steel and concrete structure – 2 lanes wide with sidewalks and bike lanes.*

5. Please state the timing of all proposed bridge work:

*Winter 2023-Winter 2025*

## Avoidance And Minimization Measures (AMMs)

This determination key result includes the commitment to implement the following Avoidance and Minimization Measures (AMMs):

### GENERAL AMM 1

Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs.

## Determination Key Description: FHWA, FRA, FTA Programmatic Consultation For Transportation Projects Affecting NLEB Or Indiana Bat

This key was last updated in IPaC on April 28, 2022. Keys are subject to periodic revision.

This decision key is intended for projects/activities funded or authorized by the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and/or Federal Transit Administration (FTA), which may require consultation with the U.S. Fish and Wildlife Service (Service) under Section 7 of the Endangered Species Act (ESA) for the endangered **Indiana bat** (*Myotis sodalis*) and the threatened **Northern long-eared bat** (NLEB) (*Myotis septentrionalis*).

This decision key should only be used to verify project applicability with the Service's [February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects](#). The programmatic biological opinion covers limited transportation activities that may affect either bat species, and addresses situations that are both likely and not likely to adversely affect either bat species. This decision key will assist in identifying the effect of a specific project/activity and applicability of the programmatic consultation. The programmatic biological opinion is not intended to cover all types of transportation actions. Activities outside the scope of the programmatic biological opinion, or that may affect ESA-listed species other than the Indiana bat or NLEB, or any designated critical habitat, may require additional ESA Section 7 consultation.

**IPaC User Contact Information**

Agency: Massachusetts Department of Transportation

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Zip: 02116

Email hana.l.isihara@dot.state.ma.us

Phone: 6178964454

**Lead Agency Contact Information**

Lead Agency: Federal Highway Administration

# MASSACHUSETTS DEPARTMENT OF TRANSPORTATION

## HIGHWAY DIVISION

### PLAN AND PROFILE OF BUTTERS ROW OVER MBTA (BRIDGE NO. W-38-003 (C99))

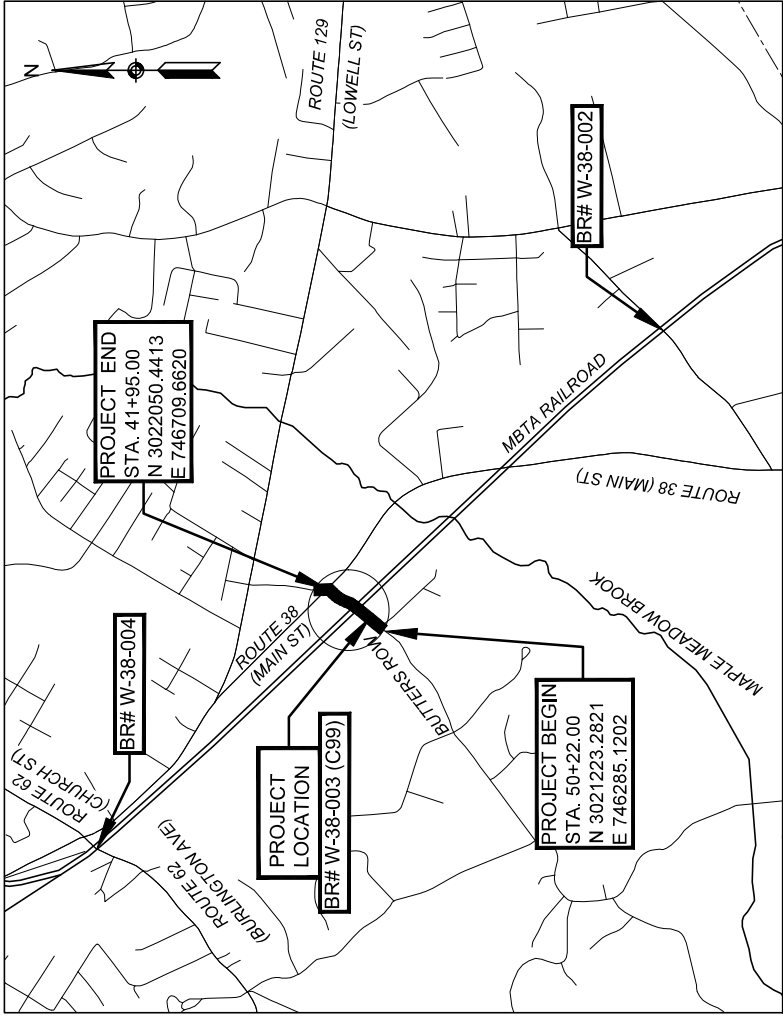
IN THE TOWN OF  
**WILMINGTON**  
MIDDLESEX COUNTY  
FEDERAL AID PROJECT NO. -

WQC/ACOE PLAN SET DATE:  
03/14/2023

#### INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET & INDEX
2	LEGEND & ABBREVIATIONS
3	GENERAL NOTES
4	KEY PLAN & BORING LOCATION PLAN
5 - 6	TYPICAL SECTIONS
7 - 8	CONSTRUCTION PLANS
9 - 14	CONSTRUCTION PROFILES
12 - 13	CURB TIE & GRADING PLANS
14 - 16	DRAINAGE & UTILITY PLANS
47 - 48	PAVEMENT MARKING & SIGNING PLAN
49	SIGN SUMMARY SHEET
20	DETOUR PLAN
24	TYPICAL TRAFFIC MANAGEMENT DETAILS
22	BUTTERS ROW SITE SPECIFIC TMP SETUPS
23	CONSTRUCTION SIGN SUMMARY
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31	LANDSCAPING PLANS
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37	WETLAND REPLICATION PLAN
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40 - 87	BRIDGE PLANS
88 - 106	CROSS SECTIONS

## 100% SUBMITTAL



LENGTH OF PROJECT = 947.83 FEET = 0.180 MILES

WILMINGTON			
BUTTERS ROW OVER MBTA			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	1	105
PROJECT FILE NO.		608929	

#### TITLE SHEET & INDEX

THESE PLANS ARE SUPPLEMENTED BY THE OCTOBER 2017 CONSTRUCTION STANDARD DETAILS, THE 2015 OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS, MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS, THE 1980 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE 1988 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK.

#### DESIGN DESIGNATION (BUTTERS ROW)

DESIGN SPEED	25 MPH
ADT (2021)	3,472
ADT (2041)	4,236
K	15.5%
D	53%
T (PEAK HOUR)	4.0%
T (AVERAGE DAY)	6.4%
DHV	657
DDHV	350
FUNCTIONAL CLASSIFICATION	URBAN COLLECTOR

DATE: DECEMBER 16, 2022

12/16/2022	100% SUBMISSION
6/30/2022	75% SUBMISSION
2/25/2021	25% SUBMISSION
DATE	DESCRIPTION
	REV #



APPROVED









































































































































CHIEF ENGINEER

DATE

EXISTING

PROPOSED

DESCRIPTION





















































		JERSEY BARRIER
		CATCH BASIN
		FLAG POLE
		GAS PUMP
		MAIL BOX
		POST SQUARE
		POST CIRCULAR
		WELL
		ELECTRIC HANDHOLE
		FENCE GATE POST
		GAS GATE
		BORING HOLE
		MONITORING WELL
		TEST PIT
		HYDRANT
		LIGHT POLE
		COUNTY BOUND
		GPS POINT
		CABLE MANHOLE
		DRAINAGE MANHOLE
		ELECTRIC MANHOLE
		GAS MANHOLE
		MISC MANHOLE
		SEWER MANHOLE
		TELEPHONE MANHOLE
		WATER MANHOLE
		MONUMENT
		STONE BOUND
		TOWN OR CITY BOUND
		TRAVERSE OR TRIANGULATION STATION
		TROLLEY POLE OR GUY POLE
		TRANSMISSION POLE
		UTILITY POLE W/ FIREBOX
		UTILITY POLE WITH DOUBLE LIGHT
		UTILITY POLE W/ 1 LIGHT
		UTILITY POLE
		BUSH
		TREE
		SWAMP / MARSH
		WATER GATE
		PARKING METER
		OVERHEAD CABLE/WIRE
		CURBING
		CONTOURS (ON-THE-GROUND SURVEY DATA)
		CONTOURS (PHOTOGRAMMETRIC DATA)
		UNDERGROUND DRAIN PIPE (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND ELECTRIC DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND GAS MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND SEWER MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND TELEPHONE DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND WATER MAIN (DOUBLE LINE 24 INCH AND OVER)
		BALANCED STONE WALL
		GUARD RAIL - STEEL POSTS
		GUARD RAIL - WOOD POSTS
		GUARD RAIL - DOUBLE FACE - STEEL POSTS
		GUARD RAIL - DOUBLE FACE - WOOD POSTS
		CHAIN LINK OR METAL FENCE
		WOOD FENCE
		HAY BALES/SILT FENCE
		TREE LINE
		SAWCUT LINE
		TOP OR BOTTOM OF SLOPE
		LIMIT OF EDGE OF PAVEMENT OR COLD PLANE AND OVERLAY
		BANK OF RIVER OR STREAM
		BORDER OF WETLAND
		100 FT WETLAND BUFFER
		200 FT RIVERFRONT BUFFER
		STATE HIGHWAY LAYOUT
		TOWN OR CITY LAYOUT
		COUNTY LAYOUT
		RAILROAD SIDELINE
		TOWN OR CITY BOUNDARY LINE
		PROPERTY LINE OR APPROXIMATE PROPERTY LINE
		EASEMENT
		SEDIMENT CONTROL BARRIER
		COIR LOG

TRAFFIC SYMBOLS

EXISTING

PROPOSED

DESCRIPTION





























		CONTROLLER PHASE ACTUATED
		TRAFFIC SIGNAL HEAD (SIZE AS NOTED)
		WIRE LOOP DETECTOR (6' x 6' TYP UNLESS OTHERWISE SPECIFIED)
		VIDEO DETECTION CAMERA
		MICROWAVE DETECTOR
		PEDESTRIAN PUSH BUTTON, SIGN (DIRECTIONAL ARROW AS SHOWN) AND SADDLE
		EMERGENCY PREEMPTION CONFIRMATION STROBE LIGHT
		VEHICULAR SIGNAL HEAD
		VEHICULAR SIGNAL HEAD, OPTICALLY PROGRAMMED
		FLASHING BEACON
		PEDESTRIAN SIGNAL HEAD, (TYPE AS NOTED OR AS SPECIFIED)
		RAILROAD SIGNAL
		SIGNAL POST AND BASE (ALPHA-NUMERIC DESIGNATION NOTED)
		MAST ARM, SHAFT AND BASE (ARM LENGTH AS NOTED)
		HIGH MAST POLE OR TOWER
		SIGN AND POST
		SIGN AND POST (2 POSTS)
		MAST ARM WITH LUMINAIRE
		OPTICAL PRE-EMPTION DETECTOR
		CONTROL CABINET, GROUND MOUNTED
		CONTROL CABINET, POLE MOUNTED
		FLASHING BEACON CONTROL AND METER PEDESTAL
		LOAD CENTER ASSEMBLY
		PULL BOX 12"x12" (OR AS NOTED)
		ELECTRIC HANDHOLE 12"x24" (OR AS NOTED)
		TRAFFIC SIGNAL CONDUIT

PAVEMENT MARKINGS SYMBOLS

EXISTING

PROPOSED

DESCRIPTION

		PAVEMENT ARROW - WHITE
		LEGEND "ONLY" - WHITE
		STOP LINE
		CROSSWALK
		SOLID WHITE LINE
		SOLID YELLOW LINE
		BROKEN WHITE LINE
		BROKEN YELLOW LINE
		DOTTED WHITE LINE
		DOTTED YELLOW LINE
		DOTTED WHITE LINE EXTENSION
		DOTTED YELLOW LINE EXTENSION
		DOUBLE WHITE LINE
		DOUBLE YELLOW LINE

POINT OF VERTICAL INTERSECTION

WILMINGTON

BUTTERS ROW OVER MBTA

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	2	105

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LEGEND & ABBREVIATIONS

ABBREVIATIONS (cont.)

GENERAL	POINT OF VERTICAL TANGENCY
PVT	PAVEMENT
PVMT	PAVED WATER WAY
PWW	RADIUS OF CURVATURE
R	REMOVE AND DISPOSE
R&D	REINFORCED CONCRETE PIPE
RCP	ROAD
RD	ROADWAY
RDVW	REMOVE
REM	RETAIN
RET	RETAINING WALL
RET WALL	RIGHT OF WAY
ROW	RAILROAD
RR	REMOVE AND RESET
R&R	REMOVE AND STACK
R&S	RIGHT
RT	STONE BOUND
SB	SLOPED GRANITE EDGING
SGE	SHOULDER
SHLD	SEWER MANHOLE
SMH	STREET
ST	STATION
STA	STOPPING SIGHT DISTANCE
SSD	STATE HIGHWAY LAYOUT LINE
SHO	SIDEWALK
SW	TANGENT DISTANCE OF CURVE/TRUCK %
T	TANGENT
TAN	TEMPORARY
TEMP	TOP OF CURB
TC	TOWN LAYOUT
TNLO	TOP OF SLOPE
TOS	TYPICAL
TYP	UTILITY POLE
UP	VARIABLES
VAR	VERTICAL
VERT	VERTICAL CURVE
VC	VERTICAL GRANITE CURB
VGC	WATER GATE
WG	WROUGHT IRON PIPE
WP	WATER METER/WATER MAIN
WM	CROSS SECTION
X-SECT	
TRAFFIC SIGNAL ABBREVIATIONS	
CAB	CABINET
CCVE	CLOSED CIRCUIT VIDEO EQUIPMENT
DW	STEADY UPRAISED HAND
FDW	FLASHING UPRAISED HAND
FR	FLASHING CIRCULAR RED
FRL	FLASHING RED LEFT ARROW
FRR	FLASHING RED RIGHT ARROW
FY	FLASHING CIRCULAR YELLOW
FYL	FLASHING YELLOW LEFT ARROW
FYR	FLASHING YELLOW RIGHT ARROW
G	STEADY CIRCULAR GREEN
GL	STEADY GREEN LEFT ARROW
GR	STEADY GREEN RIGHT ARROW
GSL	STEADY GREEN SLASH LEFT ARROW
GSR	STEADY GREEN SLASH RIGHT ARROW
GV	STEADY GREEN VERTICAL ARROW
OL	OVERLAP
PED	PEDESTRIAN
PTZ	PAN, TILT, ZOOM
R	STEADY CIRCULAR RED
RL	STEADY RED LEFT ARROW
RR	STEADY RED RIGHT ARROW
TR SIG	TRAFFIC SIGNAL
TSC	STEADY WALKING PERSON
W	STEADY CIRCULAR YELLOW
Y	
YL	

SURVEY NOTES

1.

THE EXISTING CONDITIONS SHOWN ON THIS BASE MAP ARE THE RESULT OF AN ON-THE- GROUND INSTRUMENT SURVEY PERFORMED BETWEEN JULY 9, 2018 AND NOVEMBER 6, 2018 BY GREEN INTERNATIONAL AFFILIATES, INC. (GREEN) RECORDED ON MASSDOT FIELD BOOK 44243.
2.

HORIZONTAL AND VERTICAL CONTROL WAS ESTABLISHED BY GREEN ON OCTOBER 28, 2016 WITH STATIC GPS VECTORS CALCULATED BY NATIONAL GEODETIC SURVEY'S OPUS SERVICE. IN MASSDOT DISTRICT 4 FIELD BOOK 41142, PAGE 84. HORIZONTAL DATUM IS BASED ON THE MASSACHUSETTS STATE PLANE COORDINATE SYSTEM, NAD83 (2011) EPOCH 2010.0000. VERTICAL DATUM IS NAVD 88 (COMPUTED USING GEOID12B) USING THE FOLLOWING CONTROL POINTS:

POINT	GRID NORTHING	GRID EASTING	ELEVATION	COMBINED GROUND TO GRID SCALE FACTOR
2-MDHL	3024249.8723	744113.8185	108.896	0.99998182
28-MMAG	3014918.9153	748357.2529	91.352	0.99998006

THE UNIT OF MEASUREMENTS IS US FEET. THE PROJECT COMBINED SCALE FACTOR IS 0.99998094.

3.

THE RIGHT OF WAY LINES OF BUTTERS ROW SHOWN ARE THE DIRECT RESULT OF AN INSTRUMENT SURVEY PERFORMED ON-THE-GROUND BY GREEN INTERNATIONAL AFFILIATES, INC. WITH AN ERROR OF CLOSURE OF 1 IN 50281, AND FROM PLANS AND DEEDS OF RECORD. PRIVATE PROPERTY LINES HAVE NOT BEEN SURVEYED. THEY ARE COMPILED FROM DEEDS, RECORD PLAN & GIS INFORMATION AND SHOULD BE CONSIDERED APPROXIMATE.

UTILITY NOTES:

1.

ALL UNDERGROUND UTILITIES AS SHOWN WERE COMPILED USING FIELD SURVEY INFORMATION AND AVAILABLE RECORD INFORMATION. THE LOCATION OF EXISTING PIPES OR OTHER UNDERGROUND STRUCTURES OR PROPERTY LINES ARE NOT WARRANTED TO BE EXACT. NOR IS IT WARRANTED THAT ALL UNDERGROUND PIPES OR STRUCTURES ARE SHOWN. THE CONTRACTOR SHALL CALL "DIG SAFE" (1-888-344-7233) 72 HOURS (EXCLUDING SATURDAYS, SUNDAYS AND HOLIDAYS) PRIOR TO ANY EXCAVATION TO OBTAIN ACCURATE UTILITY LOCATIONS.
2.

RECORD UTILITY INFORMATION FROM THE VARIOUS UTILITY COMPANIES AND PUBLIC AGENCIES ARE APPROXIMATE ONLY AND ACTUAL LOCATIONS MUST BE DETERMINED BY THE CONTRACTOR IN THE FIELD.
3.

THE COMPLETION AND ACCURACY OF LATERAL UTILITY SERVICES IS NOT GUARANTEED AND MUST BE VERIFIED BY THE CONTRACTOR IN THE FIELD.
4.

ALL UTILITY COMPANIES, PUBLIC AND PRIVATE MUST BE NOTIFIED, INCLUDING THOSE IN CONTROL, OF UTILITIES NOT SHOWN ON THIS PLAN, (SEE CHAPTER 370, ACTS OF 1963, MASSACHUSETTS) PRIOR TO DESIGNING, EXCAVATING, BLASTING, INSTALLING, BACKFILLING, GRADING, PAVEMENT RESTORING OR REPAVING.
5.

SUBSURFACE UTILITY LOCATIONS HAVE BEEN PLOTTED TO MEET UTILITY QUALITY LEVEL "C" AS DESCRIBED IN ASCE STANDARD 38-02 AND SUMMARIZED ON THIS SHEET. THE UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS BASED ON ABOVE-GROUND FIELD OBSERVATION AND EXISTING RECORD INFORMATION RECEIVED FROM UTILITY STAKE-HOLDERS.
6.

INVERTS SHOWN ON PLAN ARE NOT GUARANTEED TO BE ACCURATE. DUE TO THE LIMITATIONS OF FIELD OBSERVATION AND SURVEY TECHNIQUES THE INVERTS ARE SHOWN AS APPROXIMATE ONLY AND SHALL NOT BE WARRANTED TO BE CORRECT. ADDITIONAL FIELD INVESTIGATION BY THE CONTRACTOR IS NECESSARY WHERE ACCURATE MEASUREMENTS ARE REQUIRED FOR DESIGN OF CRITICAL AREAS.
7.

THE BASEMAP IS TO BE USED FOR THE SPECIFIED PROJECT ONLY AND IS NOT WARRANTED TO BE COMPLETE FOR ANY OTHER FUTURE PROJECTS.
8.

THE EXISTING INVERTS ARE SHOWN FOR BIDDING PURPOSES ONLY. ACTUAL INVERT ELEVATIONS SHALL BE CONFIRMED IN THE FIELD BY THE CONTRACTOR PRIOR TO ORDERING STRUCTURES.
9.

THE CONTRACTOR SHALL INVESTIGATE ALL UNKNOWN MANHOLES TO DETERMINE OWNERSHIP AND CONTACT THE APPROPRIATE UTILITY AGENCIES TO COORDINATE WORK. THE ENGINEER SHALL BE NOTIFIED OF ANY MANHOLES DETERMINED TO BE PART OF SEWER, DRAIN OR WATER SYSTEMS.
10.

WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
11.

THE CONTRACTOR SHALL EXERCISE EXTREME CARE WHEN EXCAVATING NEAR AND BACKFILLING IN THE VICINITY OF EXISTING UTILITIES. CONTRACTOR SHALL USE HAND EXCAVATION WHERE APPROPRIATE TO PROTECT EXISTING UTILITIES.
12.

UNLESS OTHERWISE NOTED OR APPROVED BY THE ENGINEER, THE CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES IN SERVICE AT ALL TIMES. IF THE CONTRACTOR DAMAGES UTILITY SYSTEMS, THEY SHALL IMMEDIATELY NOTIFY THE RESPECTIVE UTILITY COMPANY AND SHALL REPAIR/REPLACE THE AFFECTED SYSTEM AT HIS OWN EXPENSE.
13.

THE CONTRACTOR SHALL COORDINATE WITH PRIVATE UTILITY COMPANIES AND MAKE ARRANGEMENTS FOR ADJUSTMENTS, ALTERATIONS, AND REPLACEMENT OF PRIVATE UTILITIES WHICH ARE TO BE DONE BY THE UTILITY COMPANY.
14.

THE CONTRACTOR SHALL ALTER THE MASONRY OF THE TOP SECTION OF ALL EXISTING DRAINAGE AND SEWER STRUCTURES AS NECESSARY FOR CHANGES IN GRADE AND RESET ALL WATER, SEWER, AND DRAINAGE SURFACE CASTINGS (ETC.) WITHIN THE LIMITS OF CONSTRUCTION TO THE PROPOSED FINISH SURFACE GRADE. REQUIRED NEW MASONRY SHALL BE CLAY BRICK CONFORMING TO M4.06.2. IF AN EXISTING UTILITY STRUCTURE WITHIN THE PROJECT LIMITS IS WITHIN A PROPOSED ACCESSIBLE SURFACE, THE STRUCTURE SHALL BE CAREFULLY ADJUSTED SUCH THAT THE TOPMOST SURFACES OR THE STRUCTURE COVER SHALL BE FLUSH WITH THE SURFACE.
15.

THE CONTRACTOR SHALL CONSIDER THE INDIVIDUAL SERVICE LINES TO EACH BUILDING FROM ALL UTILITIES, WHETHER MARKED OUT OR NOT, WHEN PROCEEDING WITH EXCAVATION.
16.

SURPLUS MATERIALS OBTAINED FROM ANY TYPE OF EXCAVATION, AND ALL EXISTING AND OTHER MATERIALS NOT REQUIRED TO BE REMOVED AND STACKED OR NEEDED FOR USE ON THE PROJECT, AS DETERMINED BY THE ENGINEER, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND DISPOSED OF SUBJECT TO THE REGULATIONS AND REQUIREMENTS OF LOCAL AUTHORITIES GOVERNING THE DISPOSAL OF SUCH MATERIALS, AT NO ADDITIONAL COMPENSATION.
17.

THE CONTRACTOR SHALL SUPPORT AND PROTECT EXISTING UTILITIES IN AND AROUND EXCAVATIONS, AND, IN PARTICULAR, WHEN CROSSING UNDER OR OVER ANY DUCT OR PIPE, ALL PROTECTIVE MEASURES AND SUPPORTS SHALL BE CONSIDERED INCIDENTAL WORK AND SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE ITEM BEING INSTALLED.
18.

A MINIMUM 24-INCHES OF SEPARATION IS REQUIRED BETWEEN THE GAS MAIN AND DRAINAGE LINE AND ALSO BETWEEN THE GAS MAIN AND WATER MAIN. UTILITY DOES NOT MEET THE MINIMUM SEPARATION REQUIREMENT SHALL GET APPROVAL FROM THE UTILITY COMPANY.
19.

PROPOSED WATER MAIN SHALL BE INSTALLED WITH VERTICAL BENDS TO CROSS UNDER EXISTING WATER MAIN TO AVOID CONFLICTS AND CONNECTION FOR THE HYDRANTS.
20.

BICYCLE SAFE CASCADE GRATE SHALL BE USED FOR ALL THE INLETS ON CONTINUOUS GRADES. AT LOW POINTS RECTANGULAR BAR GRATES SHALL BE USED.
21.

ALL TEMPORARY POLE RELOCATIONS SHALL BE COORDINATED WITH THE UTILITY COMPANIES, TOWN OF WILMINGTON, AND MASSDOT. AT LOCATION ADJACENT TO THE PROPOSED RETAINING WALL FOOTING, ADDITIONAL POLE DEPTH SHALL BE INSTALLED TO PREVENT UNDERMINING FROM EXCAVATION.
22.

INSTALLATION OF UTILITY POLE ON THE SIDEWALK ADJACENT TO THE RETAINING WALL SHALL MEET MINIMUM ADA/AAB REQUIREMENTS.

WILMINGTON				
BUTTERS ROW OVER MBTA				
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS	
MA	-	3	105	
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GENERAL NOTES

SUMMARY OF UTILITY MAPPING QUALITY LEVELS:

UTILITIES AS SHOWN WERE COMPILED BASED ON A COMBINATION OF QUALITY LEVEL B, C, AND D INFORMATION. THE FOLLOWING IS A SUMMARY OF THE SURVEY MAPPING LEVELS FOR UTILITIES AS DESCRIBED IN ASCE STANDARD 38-02 "STANDARD GUIDELINE FOR THE DEPICTION OF EXISTING SUBSURFACE UTILITY DATA". THESE GUIDELINES ARE MORE FULLY DESCRIBED IN THE ASCE STANDARD.

UTILITY QUALITY LEVEL A:  
PRECISE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES OBTAINED BY THE ACTUAL EXPOSURE (OR VERIFICATION OF PREVIOUSLY EXPOSED AND SURVEYED UTILITIES) AND SUBSEQUENT MEASUREMENT OF SUBSURFACE UTILITIES, USUALLY AT A SPECIFIC POINT. MINIMALLY INTRUSIVE EXCAVATION EQUIPMENT IS TYPICALLY USED TO MINIMIZE THE POTENTIAL FOR UTILITY DAMAGE. A PRECISE HORIZONTAL AND VERTICAL LOCATION, AS WELL AS OTHER UTILITY ATTRIBUTES, IS SHOWN ON PLAN DOCUMENTS. ACCURACY IS TYPICALLY SET TO 15-MM VERTICAL AND TO APPLICABLE HORIZONTAL SURVEY AND MAPPING ACCURACY AS DEFINED OR EXPECTED BY THE PROJECT OWNER.

UTILITY QUALITY LEVEL B:  
INFORMATION OBTAINED THROUGH THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND APPROXIMATE HORIZONTAL POSITION OF SUBSURFACE UTILITIES. QUALITY LEVEL B DATA SHOULD BE REPRODUCIBLE BY SURFACE GEOPHYSICS AT ANY POINT OF THEIR DEPICTION. THIS INFORMATION IS SURVEYED TO APPLICABLE TOLERANCES DEFINED BY THE PROJECT AND REDUCED ONTO PLAN DOCUMENTS.

UTILITY QUALITY LEVEL C:  
INFORMATION OBTAINED BY SURVEYING AND PLOTTING VISIBLE ABOVE-GROUND UTILITY FEATURES AND BY USING PROFESSIONAL JUDGMENT IN CORRELATING THIS INFORMATION TO QUALITY LEVEL D INFORMATION.

UTILITY QUALITY LEVEL D:  
INFORMATION DERIVED FROM EXISTING RECORDS OR ORAL RECOLLECTIONS.

GENERAL NOTES:

1.

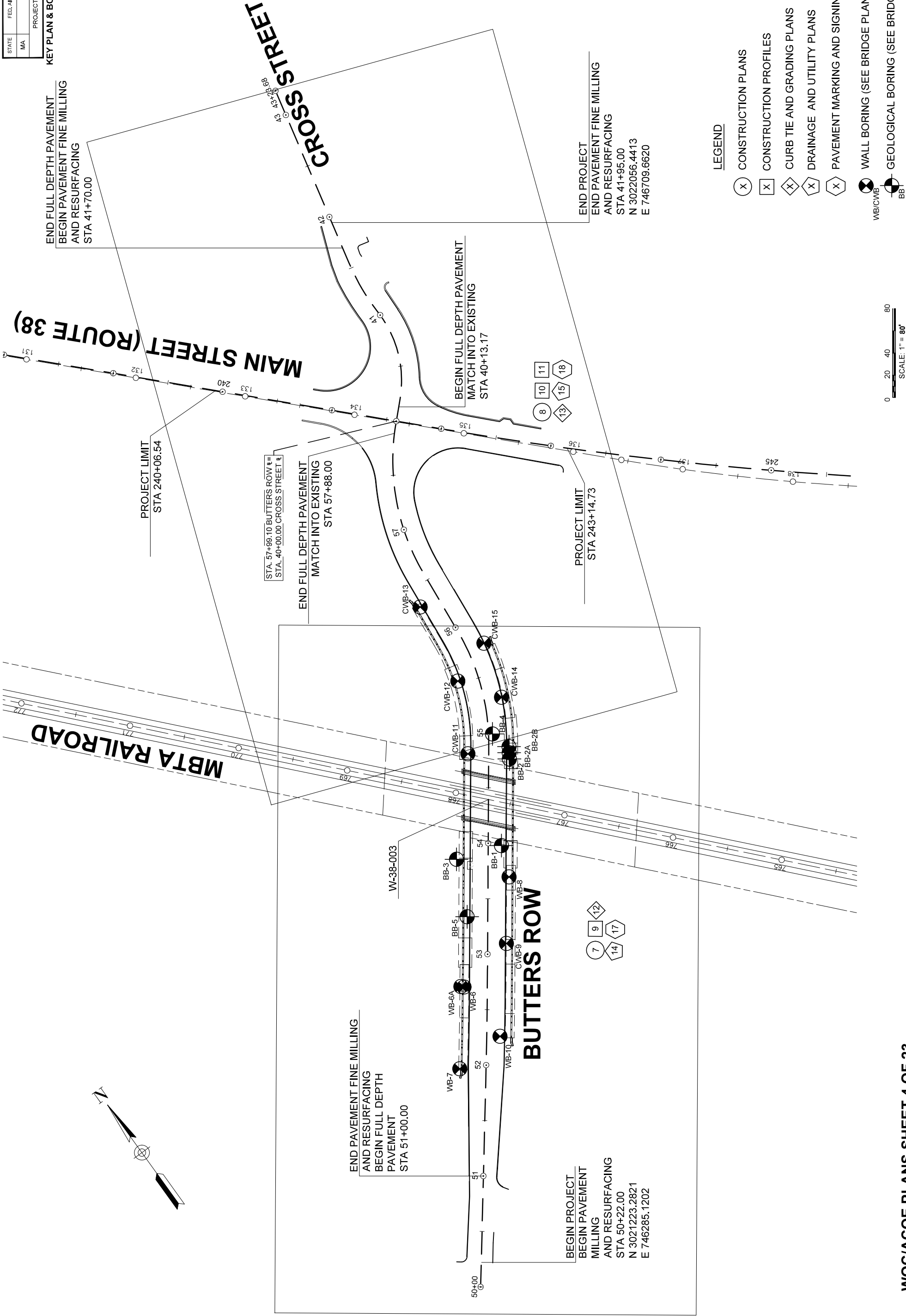
PROPOSED WATER MAIN RELOCATION ADJACENT TO THE ACCESS DRIVE BETWEEN STATION 51+08 LT AND 52+91 LT SHALL BE COMPLETED BEFORE THE ROADWAY AND RETAINING WALL CONSTRUCTION.



WILMINGTON  
BUTTERS ROW OVER MBTA

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MA	-	4	105
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KEY PLAN & BORING LOCATION PLAN



0 20 40 80  
SCALE: 1" = 80'

WB/CWB (SEE BRIDGE PLANS)

BB (SEE BRIDGE PLANS)



